

**TECHNIQUES FOR PERMITTING ACCESS ACROSS A  
CONTEXT BARRIER IN A SMALL FOOTPRINT DEVICE  
USING GLOBAL DATA STRUCTURES**

Abstract of the Disclosure

A small footprint device can securely run multiple programs from unrelated vendors by the inclusion of a context barrier isolating the execution of the programs. The context barrier performs security checks to see that principal and object are within the same namespace or memory space or to see that a requested action is authorized for an object to be  
5 operated upon. Each program or set of programs runs in a separate context. Access from one program to another program across the context barrier can be achieved under controlled circumstances by using a global data structure.